

G R Evans  
Assistant Vice President  
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EX PARTE OR LATE FILED

**NYNEX**

January 13, 1995

**Ex Parte**

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, N.W. - Room 222  
Washington, D.C. 20554

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JAN 13 1995

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

Re: **CC Docket No 94-1**

Dear Mr. Caton:

DOCKET FILE COPY ORIGINAL

Today, Mr. Frank Gumper and I, representing the NYNEX Telephone Companies (NTCs), had meetings with Ms. Lauren Belvin, Legal Advisor to Commissioner Quello, Mr. James Casserly, Legal Advisor to Commissioner Ness, Mr. Donald Gale, Intern in the office of Commissioner Ness, Mr. James Coltharp, Special Advisor to Commissioner Barrett, and Mr. Richard Welch, Legal Advisor to Commissioner Chong, regarding the item captioned above.

The attached material served as the basis for the presentation and the ensuing discussion. Any questions on this matter should be directed to me at either the address or the telephone number shown above.

Sincerely,



Attachments

cc: L. Belvin  
J. Casserly  
J. Coltharp  
R. Welch  
D. Gale

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JAN 13 1995

**NYNEX**  
**PRICE CAP REVIEW**

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

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**NYNEX's unique competitive situation requires consideration in adopting any modifications to the current price cap plan**

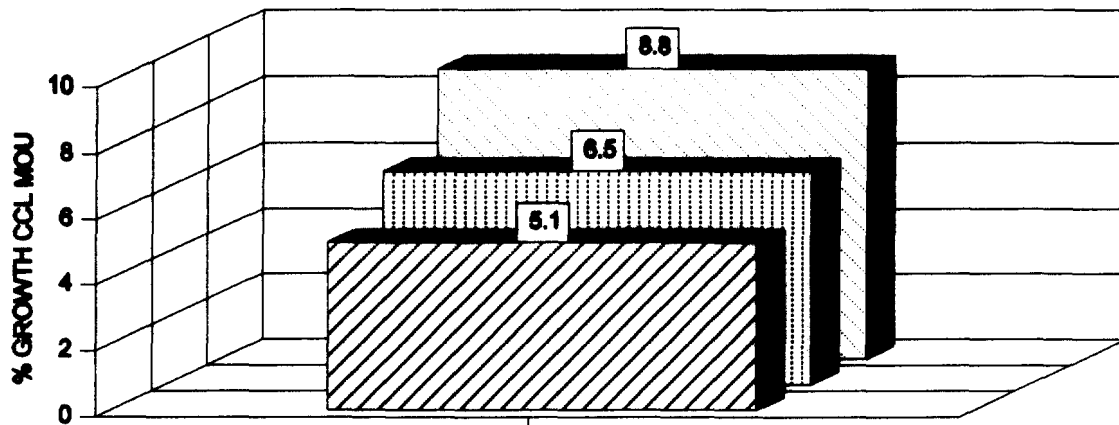
- **NYNEX's experience demonstrates how competition affects performance**
  - **Relative to other LECs:**
    - **Demand growth rates are lower**
    - **Earnings are lower**
  - **At the same time, investment in the infrastructure has continued**
- **This results in lower productivity relative to the other Price Cap LECs**

# SWITCHED DEMAND GROWTH

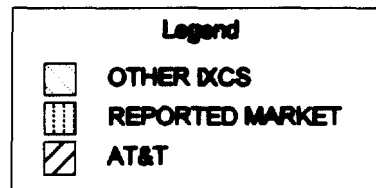
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## MOU GROWTH RATES

AT&T VS. OTHER IXCS



YEARS 1991 - 1993

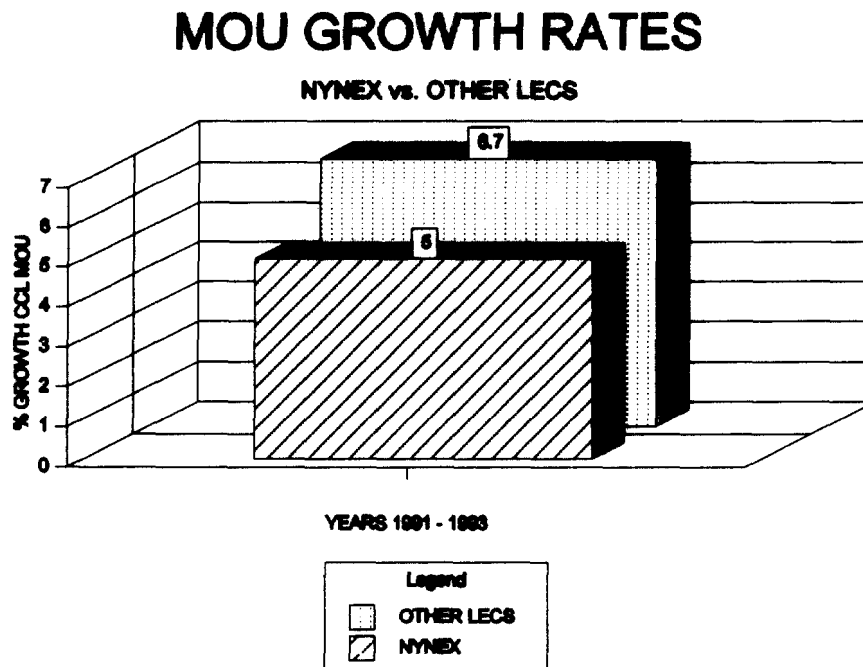


In the competitive IXC market, AT&T's demand grew more slowly than the rest of the industry.

# SWITCHED DEMAND GROWTH

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Due to increasing competition, the switched demand growth in the NYNEX region was lower than the rest of the industry by approximately 1.7% for the 1991-93 time frame. <sup>1</sup> This represents a 25% difference in demand growth between NYNEX and the remainder of the industry.



Lower demand growth translates to lower output growth. Studies show that lower output growth results in lower productivity and earnings results. <sup>2</sup>

Even AT&T's analysis on productivity for the Price Cap LECs shows that NYNEX trailed the other companies in productivity and earnings <sup>3</sup>

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<sup>1</sup>Source: CCL Minutes of Use from FCC's "Long Distance Market Share" data

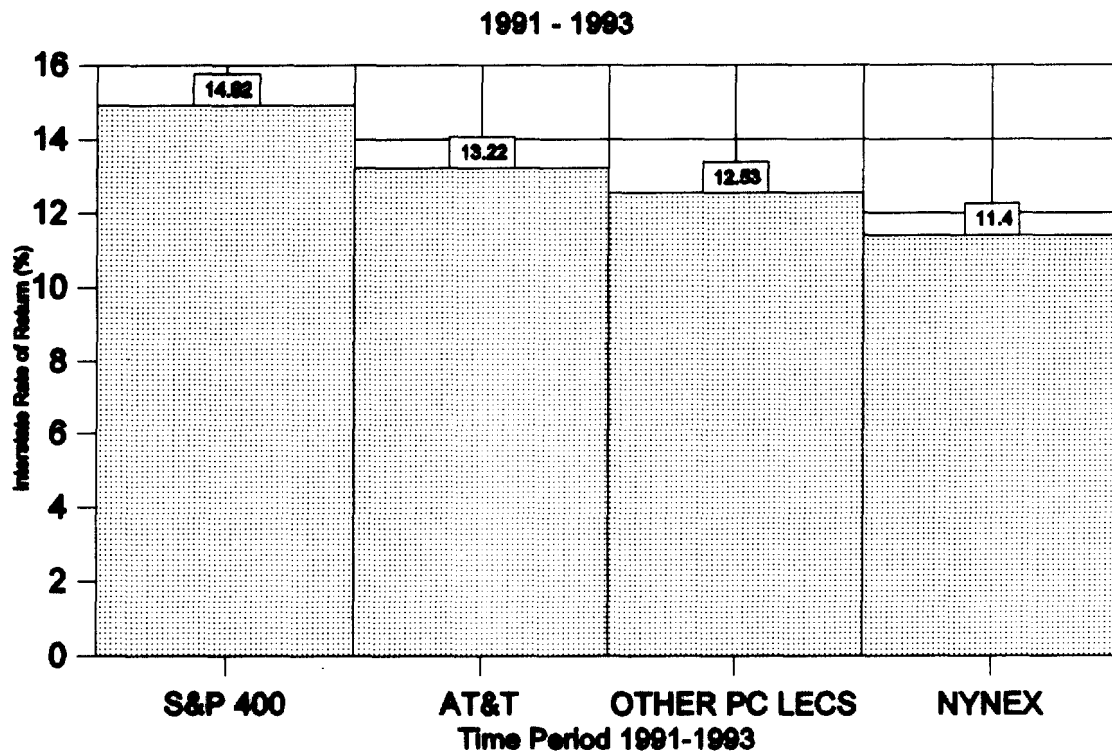
<sup>2</sup> NYNEX Comments, May 9, 1994, Christensen Study, Attachment H, Chapter 2.

<sup>3</sup>AT&T Comments, May 9, 1994, Appendix B, Table B.1

# EARNINGS – cash flow analysis

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## OVERALL EARNINGS COMPARISON

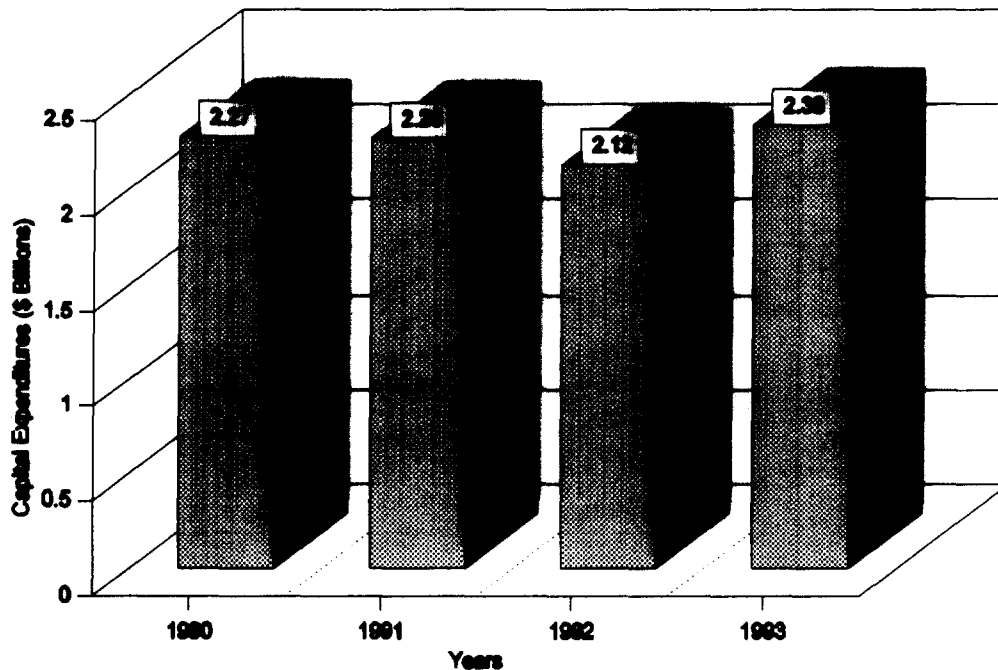


NYNEX average Interstate accounting earnings during 1991-1993 (11.40%) were below the median of the S&P 400 Industrials (14.92%), the median earnings of AT&T (13.22%) and the Other Price Cap LECS (12.53%).

# INVESTMENT

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## NYNEX TELECOM INVESTMENT



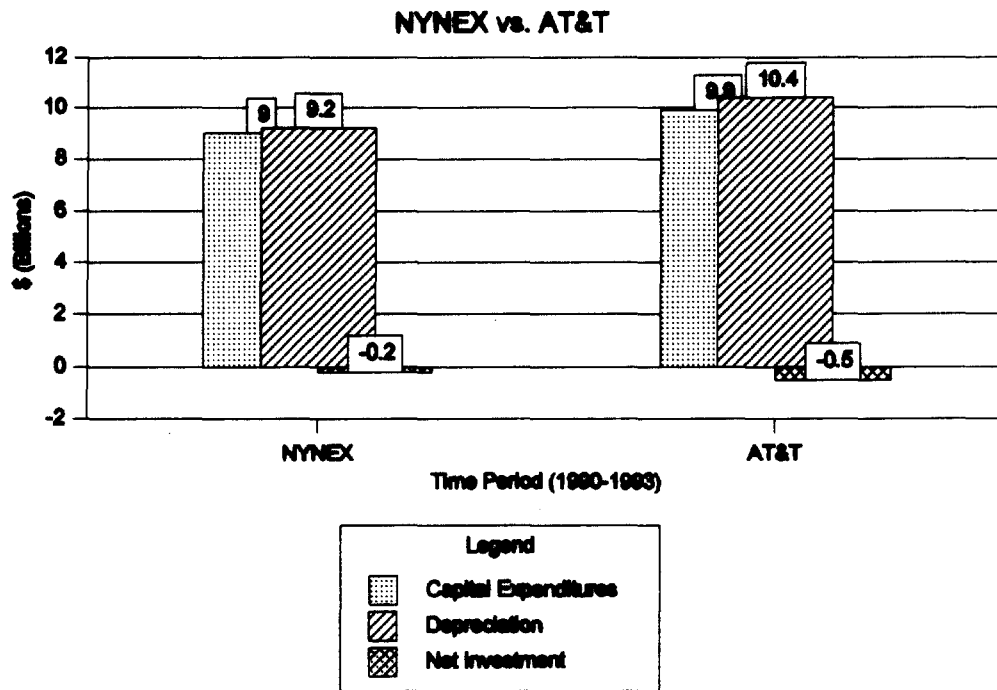
NYNEX has invested \$ 8.97 Billion in Capital Expenditures in the telecommunications sector from 1990 to 1993.

PC LECs are a critical source of investment in the U.S. telecommunications network representing approximately 75% of all investment in the telecommunications sector.

NYNEX has significantly increased deployment of advanced technologies during the period under price caps including increased penetration of digital switching from 58% to 86% and SS7 penetration from 6% to 70%.

# INVESTMENT

## NETWORK INVESTMENT



Using the "CARE" method of comparing Capital Expenditures to Depreciation for years 1990 to 1993 would yield similar net investment results for NYNEX and AT&T.

Depreciation is not a fund for future investments. NYNEX has invested **\$9.0 Billion** in the telecommunications network between 1990 and 1993 in increasingly efficient, advanced technologies such as fiber optics, SS7, and digital switching. These newer technologies are providing greater network efficiencies as they are less expensive on a per unit basis.

# **NYNEX PRICE CAP REVIEW**

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## **SHARING**

- Sharing mechanism should be eliminated to go to pure Price Cap plan
  
- However, If the Commission decides to:
  - Retain sharing, or
  - Provide a "No sharing" option with a buy-in

Then it is necessary to have an option allowing elimination of sharing based on a competitive showing



# **NYNEX PRICE CAP REVIEW**

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## **PRODUCTIVITY**

- Should be based on historical Total Factor Productivity (TFP) for industry
- Commission should adopt a 5 year "Rolling Average" TFP with a 2 year lag.
  - Captures changes in industry productivity
- Government precedent - Interstate Commerce Commission (ICC) instituted a rolling average for railroad industry in 1989
- Retain a CPD of 0.5%
- If Sharing retained, Keep TFP + 1% option with larger sharing bands.

# **NYNEX**

## **PRICE CAP REVIEW**

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### **PRICING FLEXIBILITY**

- Expanded pricing flexibility is needed to meet competition and satisfy customers
- Equalize all lower banding limits (zones, subcategory, category) to -20% for the trunking and local service categories
- Below band filings are not a solution - they impose administrative burdens and cause delay
- Allow variations in local switching rates by zone

# **NYNEX PRICE CAP REVIEW**

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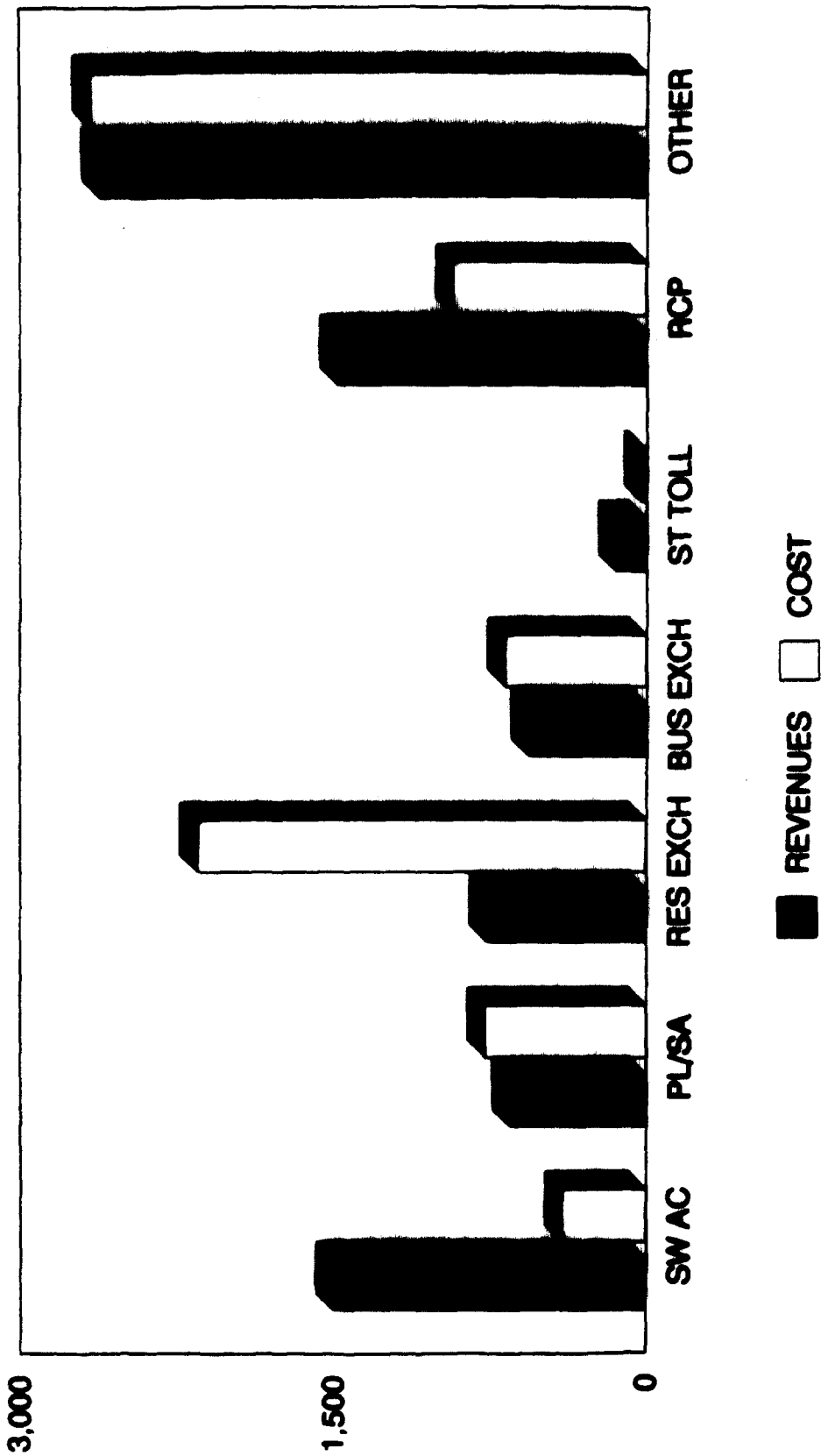
## **EXOGENOUS COST ADJUSTMENTS**

- Limit exogenous treatment to those currently allowed items whose aggregate amount exceeds 0.5% of interstate revenues
  - File for differential of aggregate amount over 0.5% benchmark
  - Maintain existing definition of allowed exogenous items

## **EBITDA**

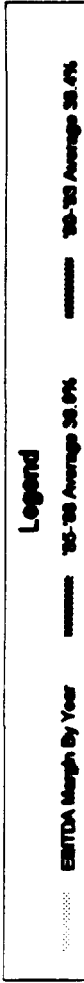
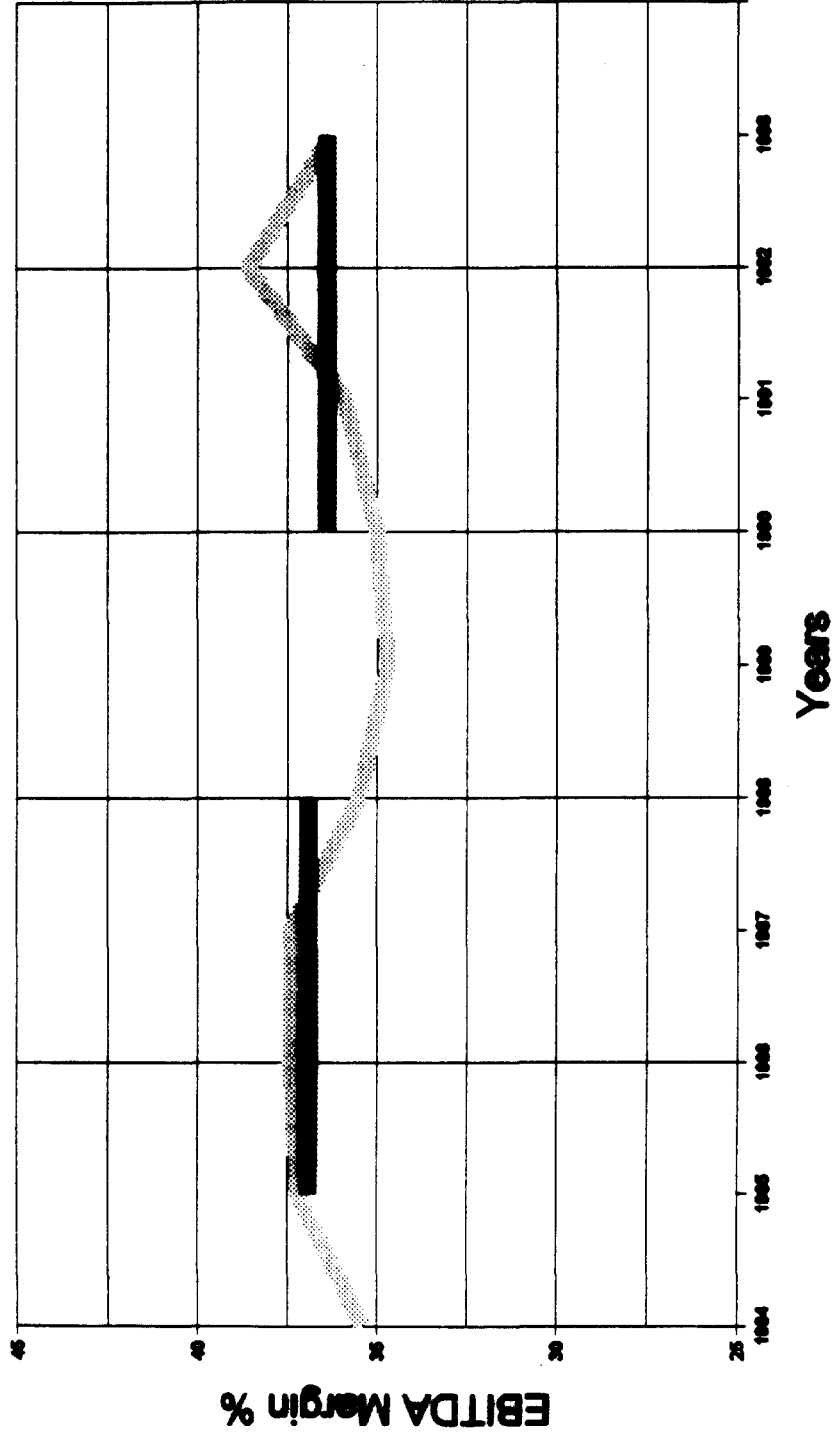
- **EBITDA data are only meaningful for analysing firms *within* an industry.**
- **They show the degree of capitalization of a firm.**
- **The LEC industry worldwide is highly capitalized, as are electric utilities and CATV companies.**
- **the EBITDA data MCI put forth do nothing but show the relative capital intensity of each industry.**
- **The MCI *ex parte* material serves no useful purpose for the Commission in reviewing LEC earnings performance.**

# **TOTAL SERVICE SPECIFIC COST STUDY** **NYNEX-NEW YORK STATE** **(\$ MILLIONS)**



# NYNEX EBITDA MARGIN

Normalized for One-Time Writeoffs



December 9, 1994

# Telecommunications Services

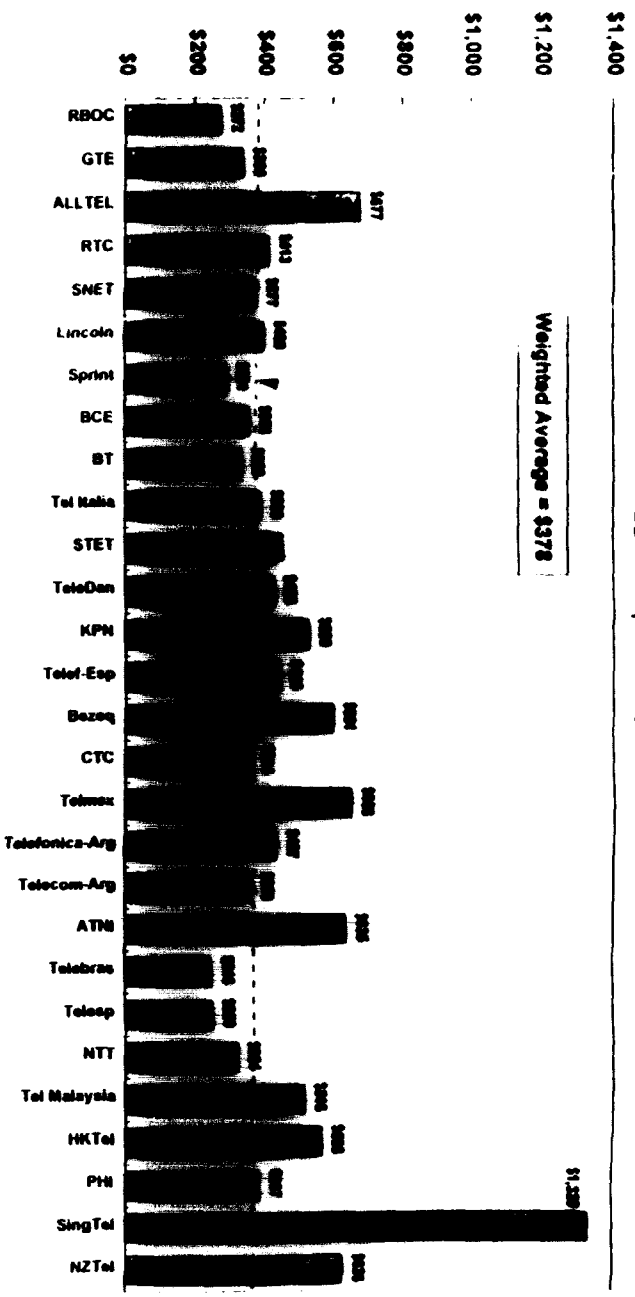
## Global Valuation and Statistical Review



**Daniel P. Reingold, CFA**  
Global Telecom Research  
Coordinator

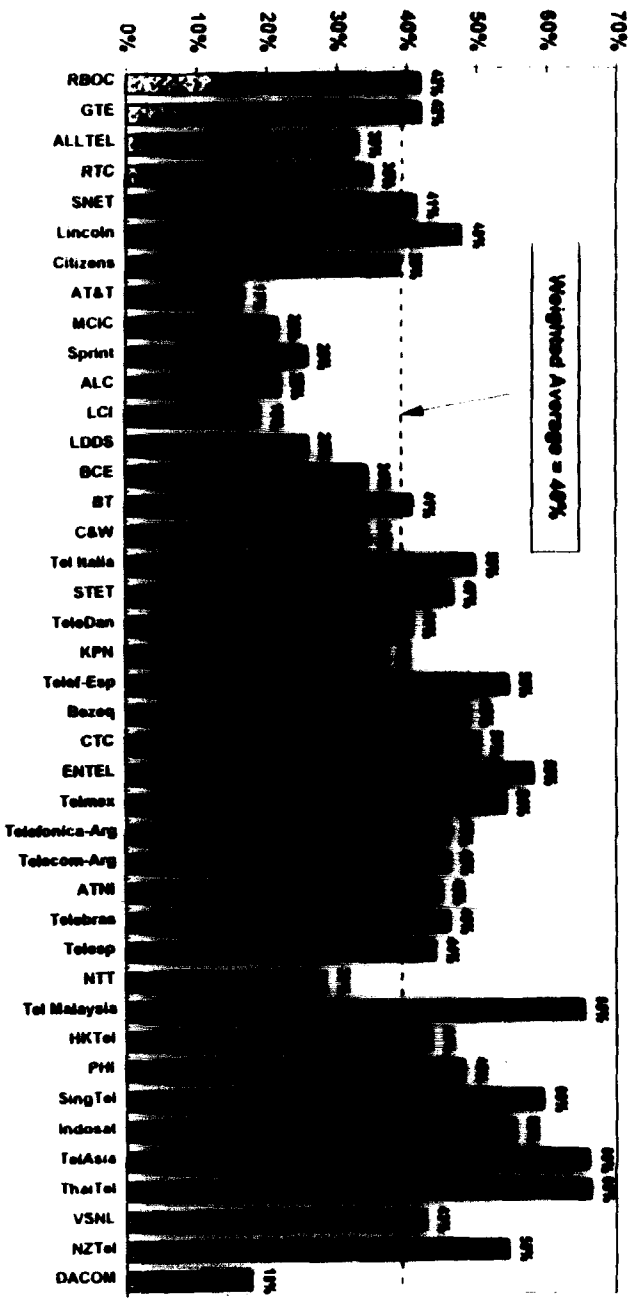
*Global Telecom Research Group*  
**Daniel P. Reingold, The Americas\***  
**Richard C. Toole**  
**Linda Runyon, Wireless**  
**Chris McFadden, Europe**  
**Adam Quinton, Asia-Pacific**  
**Mark E. Kastan**  
**Megan W. Kulick**

Figure 13  
EBITDA\* per Access Line



\*EBITDA = Earning before interest, depreciation and amortization and taxes.

Figure 14  
EBITDA\* Margin





MEMORANDUM

DATE: November 8, 1994

TO: Research

November 8, 1994

## **Telecommunications Services**

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### **Global Telecom Investment Strategy: Finding Methods to the Madness**

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- More choices and greater complexity are creating a need for more sophisticated tools in evaluating investments in telephone companies.
- To meet that need, Morgan Stanley's Global Telecom team has begun an effort to compare and contrast telecom investment opportunities around the world through an extensive and rigorous study of statistical correlations.
- In this report, we scratch the surface by exploring the range of valuation determinants and reaching some conclusions about which are most important. These include price-earnings, yield, price-to-book, and cash earnings.
- Our favorite names for consideration in a global telecom portfolio that screen well according to various valuation measures include Korea Mobile Telecom, Telekom Malaysia, Cable and Wireless, Telecom de Argentina, Telebras, MCI, US West, and KPN.

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*Research Assistance: Myles Davis*

November 8, 1994

## Telecommunications Services

### Global Telecom Investment Strategy: Finding Methods to the Madness

#### Summary and Investment Conclusion

Investing globally in the rapidly changing telecom services sector has become more of a puzzle, with few clear-cut solutions. Still, investors have grown more comfortable with the notion of global telecom investing in order to satisfy a range of investment criteria, even as the need grows for more sophisticated tools in evaluating investments in telephone companies.

This need, in our opinion, is being driven by the following:

**Greater Choice** Interest in telecom opportunities around the world is growing as investors increasingly seek to diversify outside their domestic markets. The current wave of telephone company privatizations is accelerating this process, increasing the visible supply of attractive equities. In 1994 alone, TeleDanmark, KPN (Netherlands), Pakistan Telecom, and Indosat (Indonesia) have been privatized. We expect to welcome OTE (Greece) and VSNL (India) before the year is out.

**Greater Complexity** Changes in technology and competitive forces are creating a more difficult and uncertain environment for telephone company investment. Throughout the world — not just in the U.S. and U.K., but also in Europe, Central and South America, and most of the Pacific Rim region — investors are being forced to predict

winners and losers against a constantly evolving telecom backdrop.

At the core of our initial attempts to compare and contrast telecom investment opportunities around the world is an extensive and rigorous study of statistical correlations. Such an analysis cannot solely be relied upon for the answers to our international puzzle, but it can lend considerable insight into which valuation measures are important. From this perspective, it is then our job to draw some conclusions from our observations, so here goes:

- **Telecom companies at different stages of growth appear to require different valuation perspectives.** In considering investing in emerging/growth telephone companies, we have found that price-earnings to earnings growth best captures the appropriate valuation. By contrast, investing in more mature, monopoly-based telephone companies around the world, dividend yield to earnings per share growth is, in our view, the most effective benchmark, with price-to-book value versus return on equity a very good alternative measure. To our slight surprise, given our fondness for it as a measure of value, the relationship between the price-to-cash earnings multiple and cash-earnings growth is not a well-defined one

- **Investors, using traditional valuation benchmarks, have become most efficient in valuing the U.S. telephone**

The *mature telephone company* basket includes telephone companies in "high income markets" as defined by the World Bank, specifically those countries with annual GDP per capita in excess of \$8,355.

In addition, we have provided a focused look at the *U.S. telephone companies* (Bell regional holding companies, independent telephone companies, and long distance carriers) by breaking them out into their own regressions. Table 4 outlines the groupings used throughout our analysis.

We should emphasize that any delineation criteria we employ will have exceptions, as some companies may fit more than one group or not neatly fit into a specific category. For instance, we believe that Hongkong Telecom and to some extent Singapore Telecom can be grouped in both emerging/growth telecom and mature telecom. For the purposes of these analyses, we have considered them in both baskets.

Table 4

#### Global Telephone Companies By Regression Grouping

Group	Emerg/Growth	Mature	US Telcos
ALL	Telebras CTC Telcel Telef Arg Telecom Arg PLDT TelecomAsia Tel Malaysia Iusacell Vodafone Korea Mobile Millicom Singapore Tel HK Telecom	Bell RHCs GTE British Tel Cable & Wireless Telefonica KPN TeleDanmark BCE NTT NZ Telecom Singapore Tel HK Telecom	Ameritech Bell Atlantic BellSouth NYNEX Pacific Tel SW Bell US West Alltel Cinc Bell South NE Tel Roch Tel GTE AT&T MCI Sprint ALC

RHC = Bell regional holding company

Source: Company reports and Morgan Stanley estimates.

#### Some General Observations

Table 5 provides a summary of the regression results, which, in fact, do indicate that by dividing the companies into subgroups we can gain deeper insight into appropriate valuation benchmarks, how the markets are approaching worldwide telephone companies, and finally some interesting opportunities represented by outliers in the graphs. We would summarize our observations as follows:

- The relationship between projected EPS growth and dividend yields is most pronounced in the *mature telephone companies* with a confidence factor of 81.5%. By contrast, emerging/growth telephone companies, with an r-squared of 22.2%, do not produce relationships that are as meaningful with this benchmark.

- In addition, the valuation of *mature telephone companies* works well on price-to-book versus ROE. The r-squared of 87% was the highest of all the regressions run. Intuitively, we would expect that the strong correlation reflects the highly regulated nature of the mature telephone companies' business and thus the importance of ROE as a measure of favorable regulatory status and/or higher levels of productivity.

- Correlations improve for the group of *emerging/growth companies* when we consider price-to-cash earnings versus cash earnings growth and price-earnings versus earnings per share growth. Given the importance of growth to these early-stage companies, which include wireless operators and companies in countries with low telephone penetration rates, we believe that the markets will continue to focus on these valuation benchmarks, and we would expect that over time the correlations will improve.

- The *U.S. telephone companies* demonstrate, on average, the most consistently strong correlations to all the valuation benchmarks, indicating a more efficient and homogenous approach by investors in valuing these companies. In particular, the U.S. telcos screened well using dividend yield to EPS growth as well as P/E to EPS growth. The least effective benchmark for valuation of the U.S. telco subset is cash earnings multiples vs. cash earnings growth, which illustrates that U.S. investors are still not comfortable with cash flow valuations of these companies and, despite the changing competitive landscape, still view these names on a yield and P/E basis.

Table 5

#### Regression Analysis Summary Table

	Group	Emerg/ Growth	Mature	U.S. Telco
Div Yield: EPS Growth	37.5%	22.2%	41.4%	79%
P/E: EPS Growth	53	47	86	79
P/C: Cash Earn Growth	38	43	15	56
Price/Book: ROE	25	18	47	62

Figures represent r-squared values resulting from the regression analyses.

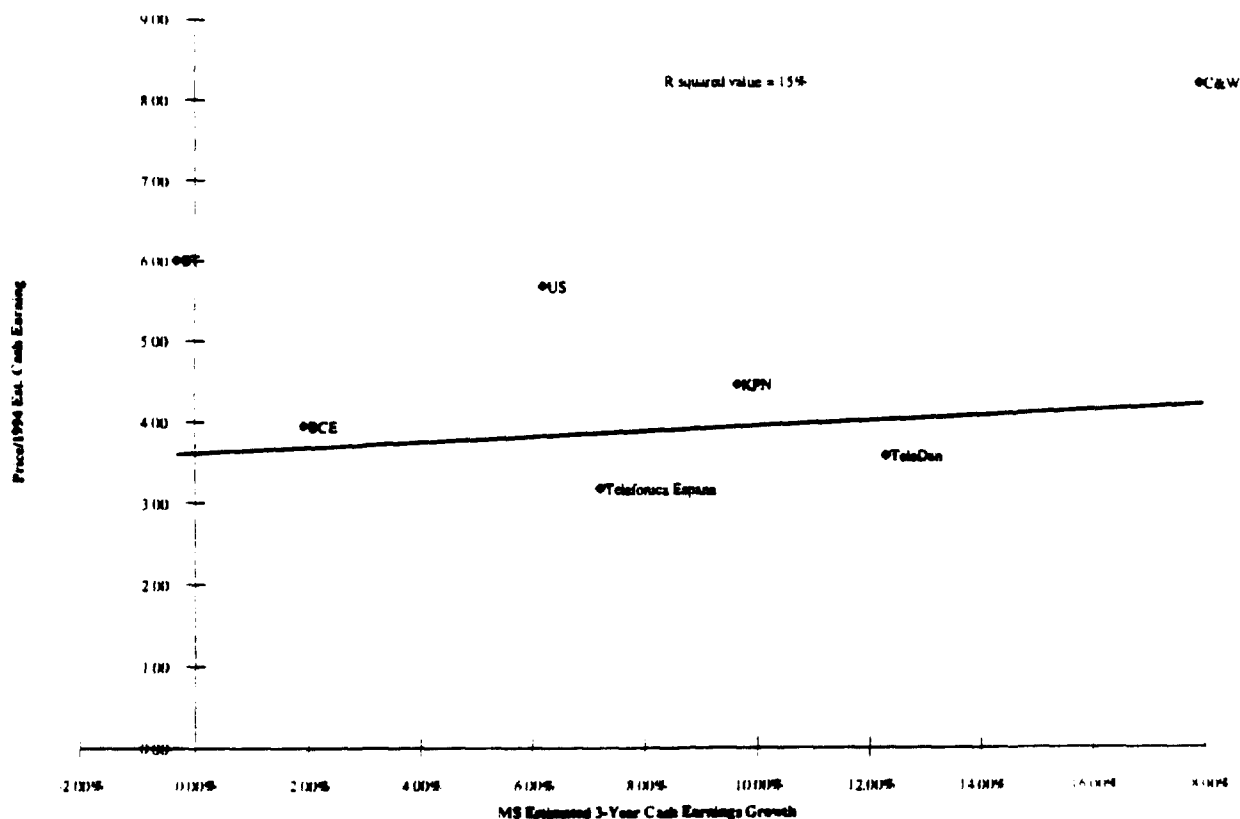
Source: Company reports and Morgan Stanley estimates.

**Mature Telephone Companies** Switching gears to the mature telephone companies, cash-earnings valuations are not as consistent and therefore only yield a correlation of 15% — too low to be meaningful. As illustrated in Figure 11, **British Telecom** certainly appears to garner a

premium value given its lackluster projected cash-earnings growth. **Telefonica Espana** appears interesting with a projected cash earnings growth rate in excess of the **Bell RHCs** but trading at a discount to the US telcos.

Figure 11

**Mature Telecoms — Price-to-Cash Earnings vs. Cash Earnings Growth**



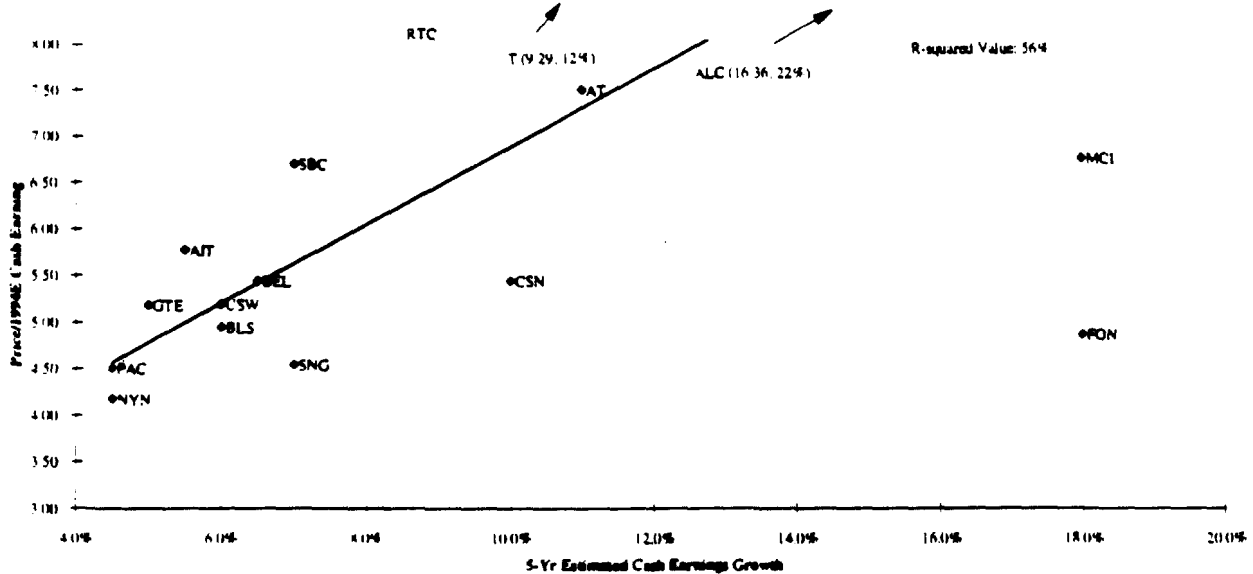
Source: Company reports and Morgan Stanley estimates.

**U.S. Telephone Companies** Finally, by directing our focus strictly to the U.S. telephone companies, the correlation improves from that of the mature telcos. Our r-squared rises to 56%, still the lowest correlation of the four ratios for the U.S. telephone companies (Figure 12). Attractive

names on this screen include NYNEX, Cincinnati Bell, and Southern New England Telephone, all of which trade at below-par cash-earnings multiples. Also interesting are the discount valuations given to MCI and Sprint.

Figure 12

**The U.S. Telcos — Price-to-Cash Earnings vs. Cash-Earnings Growth**



Source: Company reports and Morgan Stanley estimates.

### ***Sharing and Access Reform: Conflicting Goals***

It is generally recognized that the existence of a sharing mechanism in a price cap regime represents a less than optimal situation. The incentives of a firm toward greater efficiency that form the basis of any price cap plan are muted by any requirement to "give back" some of the gains made by the firm, and it is only when the loss of that greater efficiency is more than offset by the need for consumer safeguards that sharing can be justified. Under this situation, one must view sharing, then, as a necessary evil, a consumer safety net in case a productivity factor is set too low and earnings will otherwise rise to immoderate levels because market forces are not present in sufficient amounts to maintain prices at economic costs. In the current review of price caps, the record supports the elimination of sharing. If the Commission decides to retain sharing, however, or eliminate it only through an option involving a higher productivity hurdle, it must also allow for the elimination of sharing through a competitive showing. This paper will examine in brief the implications of a sharing requirement on attempts to reform Access pricing, and under what circumstances this "necessary evil" can and should be eliminated.

### ***Sharing and Competition***

The case for a sharing mechanism essentially rests on the absence of vigorous competition in a market. The salutary economic benefits of competition are well known and can be listed, but they amount to no more than an assurance that consumers reap some benefit from the market forces put on firms. Other means exist to create these assurances, and the Commission can employ these less efficient alternatives to market forces if it desires to eliminate the sharing mechanism. The Consumer Productivity Dividend (CPD) is one such mechanism. It exists solely to raise the hurdle over which LECs must pass to realize the advantages of price caps. It is possible, therefore, that some firms could and would accept a yet higher CPD hurdle to gain the greater efficiencies that come with a pure price cap regime. This option, however, is only feasible for firms not yet embroiled in a highly competitive market. This is so because, as competition takes hold in a market, and until market share stabilizes, competition dampens productivity and earnings to a degree that will not allow a firm to overcome any greater hurdle. In such a situation, productivity will decline during a transition period as outputs, i.e., demand and revenues, are eroded more rapidly by competition than most inputs can be reduced, viz., fixed expenses and common overheads cannot in the short term decline as rapidly. In the long term, as corporate downsizing takes effect, market share stabilizes, and a smaller, leaner firm emerges, productivity can increase again; but at that point, however, competition has been firmly established as the regulator of the marketplace. Long before that point is reached, of course, a sharing requirement is unnecessary. The historical results of earnings and demand for NYNEX since the inception of Price Caps suggest that it is in this transition phase, and that the Commission must now consider a means by which carriers like NYNEX, which cannot

"afford" to provide the expedient assurances of an inflated CPD, can make a sufficient showing that sharing is no longer necessary based on the existence of competition.

### ***Sharing and Access Reform***

Establishing criteria that will allow for the elimination of this "necessary evil" is important to the Commission for two reasons. First, sharing must be eliminated before Access Reform can be implemented, because a necessary part of such reform is the need to remove portions of broad markets from under price cap regulation as competition for services grows and becomes firmly rooted in geographic pockets throughout a serving area. We'll examine this impetus in a moment. The second reason sharing must be eliminated as markets become more competitive has to do with the need to eliminate the lower formula adjustment ((LFA). The LFA cannot be equitably eliminated unless the requirement to share is also done away with, since the two were crafted to provide a balanced approach to protecting consumers from excessive LEC earnings if the X factor was set too low, and, at the other end, protecting LEC stockholders from confiscatory earnings levels if the X factor were set too high.

To elaborate further on this second reason before returning to the first, it should be noted that competition in the transition period will erode earnings, and that earnings can therefore decline to a level that would trigger a LFA, if provisions for one exist. Implementing a LFA would mean that, in areas and services with relatively inelastic demand, competitive losses could be partially recouped by a LEC. Pressure for sustained short term earnings, combined with the essentially inelastic demand of some services in some areas, e.g., residential and small business customers in rural areas, would encourage this unintended abuse of the LFA. The LFA must be eliminated as markets become competitive, and the Commission can only do so by also eliminating sharing.

Returning now to the first reason that sharing should be eliminated, the Commission must envision the patchwork of competitive areas and services that is rapidly forming, and which requires a targeted approach to regulatory relief. The NYNEX Universal Service Preservation Plan (USPP) provides an example of the type of disaggregation that could be useful in differentiating among services and zones within a region, although it is not the only valid approach. The USPP distinguishes between multi-line and single-line customer services, and it establishes three different zones based on the amount of competition that is present in each, with Zone 1 representing the most competitive zone. One would expect that the most competition would be for multi-line customers in Zone 1 (as in fact is the case), and that it would be those services in Zone 1 that would first be granted streamlined regulation because of competition.

With a requirement for sharing still in place, however, and with the Part 69 requirement to allocate costs on a study-area level, no services in *any* zone, no matter how competitive, could be removed from under price caps, because of the need to extract out the associated costs and revenues, and the impossibility of doing so on such a sub-study-

area, sub-switch basis. Since telephone switching equipment provides multiple services in each central office (CO), and since only *some* services would be competitive in that CO, an allocation mechanism would have to be developed on a switch-by-switch basis -- essentially an accounting morass. The upcoming tariff filings for Video Dialtone may raise this problem even before any Access Reform efforts are completed.

One possible solution to the cost allocation problem with the sharing requirement in place would be to allow cost allocation below a study-area level, and to remove *all* services in a zone from price cap regulation, once competition in that zone has reached a predetermined level. That would solve the problem of needing to apportion switch costs, but, even apart from the Part 69 changes it would require, it would create a situation in which all services in an area or zone are removed from price cap regulation even though only some customers in that area (e.g., multi-line customers) have competitive alternatives. Another solution might be to treat services removed from under price caps as is done today, viz., assume that revenues equal costs for these services. Such an approach works well enough when the services and associated revenues outside of price caps are quite small. Once major portions of revenues are removed from under price caps, however, the charge could be made that the return from these competitive services is drawing down the overall return and thereby lessening a sharing obligation and allowing less competitive services to absorb and offset the downward pressure on competitive service rates.

The politically more palatable approach of targeting regulatory relief more precisely is possible only with a two-dimensional approach like the one employed in the NYNEX USPP, and that approach requires that there be no requirement for sharing. Fortunately, since both the need for regulatory relief and a case for the elimination of sharing can be based on the presence of competition, an elegant solution is possible in the form of establishing criteria that will allow the Commission to eliminate sharing on a LEC-specific basis, once competitive inroads are sufficient.

### ***Criteria To Be Used***

The criteria to be used in assessing whether sharing can be eliminated will no doubt be the subject of much debate, hence, the Commission must begin immediately to consider them. NYNEX suggests that they include both quantitative and qualitative elements, since the latter alone may not provide adequate assurances, and the former are necessarily historical and inequitably dilatory in a time of rapid change in the marketplace. Quantitative data should be based largely on earnings trends, supplemented by demand data, rather than solely on market share, which is difficult for LECs to obtain and in any case is less meaningful when seeking to assess competitive inroads across an entire region. Quantitative data should largely be used to see if competition has formed, whereas qualitative data should be used to confirm that the competition that *has* formed will flourish. In that regard, information on the deployment of competing networks, LEC efforts to promote competition, and the regulatory environment in a region should be key. The showing ought to be that a "substantial



portion<sup>9</sup> of LEC revenues across a region are subject to competitive threats, and that the LEC and regulators in the region have taken actions that allow for robust competition. The qualitative criteria include:

- Are competitors (CLECs) allowed interconnection to points within the LEC network where technically and economically feasible?
- Do CLECs have access, on an unbundled basis, to LEC network functions, services, and information, including databases, signaling, and network routing processes?
- Do CLECs have equal access to poles, conduits, and rights of way?
- Does the LEC integrate competitors' Class 4 and 5 switches into the LEC traffic routing plan through unbundled switching and facility elements at cost-based rates?
- Are CLECs allowed to resell and share unbundled LEC network services?
- Have state and federal franchise restrictions to entry been eliminated, so that any competitor can enter the local exchange market?
- Do CLECs have non-discriminatory access to telephone numbers?
- Do LECs and their competitors compensate each other for terminating traffic on each others' network?
- Have LECs and CLECs established cooperative engineering, operational, maintenance, and administrative practices and procedures?
- Has the LEC taken reasonable efforts to make telephone numbers portable?

Armed with the assurances derived from these quantitative and qualitative data, the Commission would then act to eliminate the sharing requirement for the petitioning LEC. It would still require further, particularized information, if the LEC contended also that some classes of services in certain areas or zones faced demonstrably sufficient competition to warrant having them removed from price cap regulation. The showing for regulatory relief would still rely on a mix of quantitative and qualitative data, but, because of the localized nature of the competition, a heavier reliance could be placed on quantitative data, including market share.

### ***Conclusions***

The Commission can and should eliminate the sharing requirement. To address the concerns expressed by some parties in this proceeding, two methods can be developed to allow it to achieve this desirable end: 1) it can impose an additional CPD to insure that LECs with the ability to do so can flow the effects of a greater productivity offset to